

MINERAL INDUSTRY SURVEYS

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ZINC IN MAY 1996

Domestic mine production of 50,600 metric tons in May was nearly 12% higher than in April, but more than 7% lower than in May 1995. The estimated smelter production remained the same as the previous month's production, but was about 4% below production in May 1995. Apparent consumption of zinc metal in May was nearly 6% lower than in April 1996 and more than 6% lower than in May 1995.

The *Platt's Metals Week* composite price for North American Special High Grade zinc in May was about the same as in April.

At the beginning of May, ASARCO Incorporated sold its 15% stake in MIM Holdings, ending a 66-year association between the two companies. Asarco will use the \$39 million after-tax gain to reduce its debt-to-capitalization ratio from 34% to 28.3% [*Platt's Metals Week*, May 20, 1996].

Cominco of Canada is to increase ore production from its Red Dog Mine by 40%, from 2.3 million tons to 3.2 million tons per year. The increased production, to be achieved by 1999, will come from the main orebody. The recently discovered Aqqaluk deposit doubled the size of zinc reserves at Red Dog, while maintaining combined zinc grade of 16% [*Metal Bulletin*, May 6, 1996].

Arcon International Resources has announced

the results for the first 6 months of its 2-year program for exploration drilling around its wholly-owned Galmoy Mine in Ireland. The K-zone was traced for 1.3 kilometers and showed an average width of 50 meters and an average thickness of 5.63 meters. Three other zones have been drilled, two lying east of the G orebody and one to the west. The discoveries contained up to 42.84% zinc and increased the minable reserves to 8 million tons [*Mining Magazine*, May 1996].

Italian state-owned resources group, Enirisorse SpA, began the process of privatizing its lead and zinc smelters and refineries at Porto Vesme and San Gavino, respectively. The zinc smelter produces about 160,000 tons of zinc slab using both the Imperial Smelting Process and the electrolytic method. The group also invited tenders for the purchase of its Pertusola Sud SpA zinc operation at Crotone. The plant produces about 100,000 tons of refined zinc per year.

At the end of May, Outokumpu began zinc ore mining at the Millikkorame deposit in central Finland. Proven reserves amount to 700,000 tons grading 8% zinc, with byproduct lead, copper, gold, and silver. The ore, produced at the annual rate of 240,000 tons, will be milled at the nearby Pyhasalmi concentrator [*Mining Journal*, May 17, 1996].

TABLE 1
SALIENT ZINC STATISTICS 1/

(Metric tons)

	1995 p/			1996			
	Jan.-May	May	Jan.-Dec.	March	April	May	Jan.-May
Production:							
Mine, recoverable zinc	252,000 r/	54,500	601,000	49,700	45,300	50,600	247,000
Smelter, slab zinc	157,000 r/	31,300	363,000	30,400	30,000 e/	30,000 e/	151,000 e/
Oxide, (gross weight)	54,100 r/	11,400 r/	130,000	12,200	11,400	11,200	55,800
Consumption:							
Slab zinc, reported	282,000 r/	53,400 r/	638,000	52,200 r/	49,700 r/	51,400	254,000
Ores e/ 2/	1,000	200	2,400	200	200	200	1,000
Zinc-base scrap e/ 2/	50,000	10,000	120,000	10,000	10,000	10,000	50,000
Copper-base scrap e/ 2/	55,000	11,000	132,000	11,000	11,000	11,000	55,000
Aluminum-and magnesium-base scrap e/ 2/	350	70	840	70	70	70	350
Total e/	389,000 r/	74,700 r/	893,000	73,500 r/	71,000 r/	72,700	360,000
Apparent consumption, metal 3/	576,000 r/	103,000	1,240,000	101,000	102,000 r/	96,300	475,000
Stocks of slab zinc, end of period:							
Producer 4/	XX	11,600 r/	XX	8,680 r/	8,680 r/ e/	8,680 e/	XX
Consumer 5/	XX	42,200	XX	42,700 r/	44,100 r/	43,500	XX
Merchant	XX	6,000	XX	4,520	4,600	3,050	XX
Total	XX	59,800 r/	XX	55,900 r/	57,400 r/	55,200	XX
Imports for consumption:							
Slab zinc	410,000	69,700	856,000	65,000	72,200	NA	257,000 6/
Oxide	17,900	4,880	49,100	4,840	4,540	NA	19,700 6/
Ore and concentrate	7,740	850	10,300	680	12	NA	964 6/
Exports:							
Slab zinc	2,040	420	3,080	--	206	NA	258 6/
Waste and scrap (zinc content)	24,200	5,130	55,900	4,630	5,770	NA	18,700 6/
Ore and concentrate (zinc content)	29,000	14,600	424,000	1,880	8,580	NA	19,400 6/
Oxide	2,650	649	7,090	613	507	NA	2,350 6/
Price:							
Platt's Metals Week North American Special High Grade, average, cents per pound	54.02	56.10	55.83	51.24	50.61	50.50	50.73

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Recoverable zinc content.

3/ Smelter production + imports - exports + beginning stocks - ending stocks.

4/ Includes stocks held at smelters and elsewhere by producers, as reported by ABMS, plus estimated additional data for smelters not reporting to ABMS.

5/ In addition to stocks reported by consumers on a monthly basis, about 10,000 tons was estimated to be held by companies reporting on an annual basis only.

6/ Includes data through April only. May data not available at time of publication.

TABLE 2
MINE PRODUCTION OF RECOVERABLE ZINC IN THE UNITED STATES 1/

(Metric tons)

State	1995 p/			1996			
	Jan. - May	May	Jan. - Dec.	March	April	May	Jan. - May
Missouri	20,900	4,510	47,000	4,110	4,190	3,940	20,000
Other States 2/	231,000	50,000	554,000	45,600	41,100	46,700	227,000
Total	252,000 r/	54,500	601,000	49,700	45,300	50,600	247,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Alaska, Colorado, Idaho, Illinois, Montana, New York, and Tennessee.

TABLE 3
ESTIMATED TOTAL PRODUCTION, SHIPMENTS, AND STOCKS OF SLAB ZINC 1/ AND ZINC OXIDE 2/, BY MONTH 3/

(Metric tons)

Month	Stocks at beginning of month		Production		Shipments		Stocks at end of month	
	Slab Zinc	Zinc Oxide	Slab Zinc	Zinc Oxide	Slab Zinc	Zinc Oxide	Slab Zinc	Zinc Oxide
1995: p/								
Jan.-May	XX	XX	157,000	54,100	158,000	57,000	XX	XX
May	10,900	6,590	31,300	11,400	31,700	11,300	10,700	6,620
June	10,700	6,620	30,300	10,700	31,200	10,800	10,200	6,510
July	10,200	6,510	29,900	9,690	30,200	9,410	10,400	6,790
August	10,400	6,790	29,400	10,700	30,300	11,000	9,650	6,430
September	9,650	6,430	29,200	11,700	29,700	11,100	9,490	6,980
October	9,490	6,980	29,200	11,200	29,600	11,300	9,450	6,800
November	9,450	6,800	28,000	11,100	28,900	11,300	8,860	6,620
December	8,860	6,620	30,000	10,900	29,200	10,500	10,100	6,990
Total	XX	XX	363,000	130,000	368,000	132,000	XX	XX
1996:								
January	10,100	6,990	31,300	10,700	29,900	12,900	11,500	4,760
February	11,500	4,760	29,400	10,400	30,600	12,000	10,300 r/	3,100
March	10,300 r/	3,100	30,400	12,200	32,000	11,500	8,680 r/	3,740
April	8,680 r/	3,750	30,000 e/	11,400	30,000 r/ e/	11,600	8,680 r/ e/	3,530
May	8,680 e/	3,530	30,000 e/	11,200	30,000 e/	11,300	8,680 e/	3,420
Jan.-May	XX	XX	151,000 e/	55,800	152,000 e/	59,400	XX	XX

e/ Estimated. p/ Preliminary. r/ Revised. XX Not applicable.

1/ ABMS reported data, plus additional reported and estimated data for smelters not reporting to ABMS.

2/ Excludes impure zinc oxide produced from other processes.

3/ Data are rounded to three significant digits; may not add to totals shown.

Sources: ABMS and U.S. Geological Survey.

TABLE 4
ESTIMATED DISTRIBUTION 1/ OF ZINC OXIDE SHIPMENTS BY INDUSTRY 2/ 3/

(Metric tons)

Industry	1995 p/			1996			
	May r/	Jan.-May r/	Jan.-Dec.	March	April	May	Jan.-May
Agriculture	W	W	W	W	W	W	W
Ceramics	283	1,320	3,390	533	550	574	2,550
Chemicals	2,680	12,900	30,000	2,350	2,640	2,420	12,900
Paints	398	2,000	4,790	440	424	424	2,220
Photocopying	W	W	W	W	W	W	W
Rubber	7,450	35,500	85,300	7,610	7,410	7,420	39,000
Other	535	5,250	8,900	606	545	505	2,760
Total	11,300	57,000	132,000	11,500	11,600	11,300	59,400

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

1/ Distribution of U.S. producers only. Imports excluded because distribution by industry cannot be distinguished.

2/ May include in-house consumption.

3/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 5
APPARENT CONSUMPTION OF SLAB ZINC ACCORDING TO INDUSTRY USE AND PRODUCT 1/

(Metric tons)

Industry and product	1995 p/			1996			
	May	Jan.-May r/	Jan.-Dec.	March	April r/	May	Jan.-May
Galvanizing:							
Sheet and strip	40,500 r/	220,000	490,000	41,100 r/	42,100	39,900	196,000
Other	13,800 r/	78,800	168,000	13,400 r/	14,100	12,600	62,400
Total	54,300 r/	299,000	658,000	54,500 r/	56,200	52,500	258,000
Brass and bronze	13,900 r/	81,000	165,000	13,600 r/	13,700	13,100	62,500
Zinc-base alloy	20,700 r/	128,000	250,000	18,200 r/	17,300	17,000	85,500
Other uses 2/	14,100 r/	69,100	166,000	14,700	14,800	13,700	69,500
Total apparent consumption	103,000	576,000	1,240,000	101,000	102,000	96,300	475,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes zinc used in making zinc dust, wet batteries, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, zinc oxide, and miscellaneous uses not elsewhere specified.

TABLE 6
AVERAGE MONTHLY ZINC PRICES

Month	North American Special High Grade cents/lb.	LME cash		Sterling exchange rate dollars/£
		cents/lb.	£/M.T.	
1995:				
May	54.02	46.99	652.65	1.587373
June	54.01	45.80	633.07	1.594814
July	52.44	46.57	643.67	1.595160
August	51.23	46.01	647.45	1.566796
September	50.05	44.73	632.61	1.558970
October	49.68	44.41	620.52	1.577929
November	52.02	46.75	659.65	1.562476
December	50.87	46.18	660.89	1.540505
Year average	55.83	46.82	656.59	1.572016
1996:				
January	50.59	46.22	666.59	1.528771
February	50.69	46.98	674.37	1.535960
March	51.24	48.26	696.72	1.527062
April	50.61	47.42	689.57	1.516041
May	50.50	46.98	683.57	1.515236

Source: Platt's Metals Week.

TABLE 7
U.S. EXPORTS OF ZINC 1/

Material	1995		1996			
	Quantity (metric tons)	Value (thousands)	April		Jan.-Apr. 2/	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Slab zinc	3,080	\$4,340	206	\$281	258	\$364
Ore and concentrate (zinc content)	424,000	201,000	8,580	3,340	19,400	9,170
Waste and scrap (zinc content)	55,900	36,100	5,770	4,060	18,700	11,300
Powders, flakes, and dust (zinc content)	8,840	15,800	732	1,450	4,660	9,040
Oxide (gross weight)	7,090	9,110	507	708	2,350	3,190
Chloride	1,690	1,250	72	76	419	338
Sulfate	4,210	2,260	571	335	1,850	1,030
Compounds, other	1,690	4,350	221	693	745	2,170

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May data not available at time of publication.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ZINC 1/

Material	1995		1996			
	Quantity (metric tons)	Value (thousands)	April		Jan.-Apr. 2/	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Slab zinc	856,000	\$903,000	72,200	\$77,800	257,000	\$273,000
Ore and concentrate (zinc content)	10,300	4,380	12	6	964	440
Waste and scrap (gross weight)	42,300	19,700	2,550	1,010	11,000	4,690
Powders, flakes, and dust (gross weight)	11,700	20,400	996	1,750	3,150	5,400
Oxide (gross weight)	49,100	54,200	4,540	4,850	19,700	19,800
Chloride	2,450	2,370	150	143	778	664
Sulfate	5,400	3,820	361	213	1,610	1,130
Compounds, other	1,850	2,490	48	31	413	336
Dross, ashes, and fume (zinc content)	10,900	8,260	1,560	1,020	5,250	3,620

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May data not available at time of publication.

Source: Bureau of the Census.

TABLE 9
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY 1/

(Metric tons)

Material and country	General imports			Imports for consumption		
	1995	1996		1995	1996	
		April	Jan.-Apr. 2/		April	Jan.-Apr. 2/
Ore and concentrate: (zinc content)						
Mexico	7,030	12	964	7,030	12	964
Peru	5,540	103	800	3,310	--	--
Other	463	--	161	15	--	--
Total	13,000	115	1,930	10,300	12	964
Blocks, pigs, or slab:						
Australia	15,400	646	3,640	18,200	646	4,020
Brazil	52,900	1,810	11,400	67,800	1,810	11,400
Canada	468,000	51,600	176,000	469,000	51,600	176,000
Finland	13,500	--	--	13,500	--	--
Mexico	99,200	6,660	31,100	99,200	6,660	31,100
Peru	21,500	2,840	9,850	21,500	2,840	9,850
Russia	12,800	--	--	12,800	--	--
Spain	109,000	9,650	9,650	98,000	8,610	17,600
Other	55,300	59	4,190	53,700	59	4,190
Total	848,000	73,200	248,000	856,000	72,200	257,000
Dross, ashes, & fume (content)	10,900	1,560	5,250	10,900	1,560	5,250
Grand total	872,000	74,900	256,000	877,000	73,800	257,000
Other (gross weight):						
Waste and scrap	42,300	2,550	11,000	42,300	2,550	11,000
Sheets	332	1,300	1,880	332	1,300	1,880
Dust, powder, flakes	11,700	996	3,150	11,700	996	3,150

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May data not available at time of publication.

Source: Bureau of the Census.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF ZINC OXIDE, BY COUNTRY 1/

(Metric tons)

Country	1995	1996	
		April	Jan.-Apr. 2/
Canada	24,800	2230	9,390
China	3,040	--	--
Mexico	16,600	1680	7,690
Other	4,640	620	2,640
Total	49,100	4540	19,700

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May data not available at time of publication.

Source: Bureau of the Census.